

# **INDEX**

**DOKLADY BIOLOGICAL SCIENCES**

**Volumes 196-201, 1971**



**DOKLADY BIOLOGICAL SCIENCES**

Volumes 196-201, 1971

(A translation of the Biological Sciences sections of Doklady Akademii Nauk SSSR)

**A**

- Abdullaev, Kh. A. - 462  
Abramov, Yu. B. - 625  
Agadzhanyan, N. A. - 368, 384  
Akoev, G. N. - 268  
Aksyuk, T. S. - 285  
Aladzhalova, N. A. - 246  
Aleksandrovskaya, M. M. - 256  
Alekseev, V. I. - 539  
Alekseeva, L. A. - 441  
Alimov, A. F. - 162  
Alov, I. A. - 466  
Ametov, Z. - 578, 752  
Andreev, L. V. - 614  
Andreev, V. V. - 82  
Andzhaparidze, O. G. - 126  
Antonov, I. I. - 507  
Arzumanov, Yu. L. - 512  
Ashmarin, I. P. - 735  
Aspiz, M. E. - 466  
Ata-Muradova, F. A. - 230, 657

**B**

- Babskii, E. B. - 400, 535  
Badaev, N. S. - 679, 703  
Baevskii, Yu. B. - 179  
Batulin, Yu. M. - 655  
Beierdorfer, I. - 535  
Bekhazar'yants, M. M. - 48, 706  
Belousova, N. I. - 710  
Belova, A. V. - 218  
Belova, T. I. - 657  
Belyaev, D. K. - 156, 652  
Berdina, N. A. - 259  
Berman, A. L. - 237  
Blagodatova, E. T. - 632  
Bocharov, A. F. - 545  
Bochkov, N. P. - 588  
Bogdanova, E. V. - 400, 535  
Bogodist, Yu. I. - 324  
Bondarenko, V. E. - 14  
Breslav, I. S. - 519  
Brodkii, V. Ya. - 233  
Budantsev, A. Yu. - 299  
Bulatova, N. Sh. - 479  
Bunina, T. F. - 625  
Burdanov, V. S. - 532

- Butenko, R. G. - 40  
Buznikov, G. A. - 575, 692

**C**

- Chahovets, N. R. - 374  
Chekova, V. V. - 192  
Chentsov, Yu. S. - 1  
Chernyakhovskaya, I. Yu. - 85  
Chernykh, N. L. - 765  
Chistova, M. N. - 581  
Chubareva, L. A. - 35  
Chugunov, Yu. A. - 233  
Chuprina, L. M. - 230

**D**

- Dalin, M. V. - 528, 774  
Darin'skii, Yu. A. - 388  
Davidova, E. G. - 608, 741  
Demin, N. N. - 249, 262, 417  
Deryagin, G. V. - 703  
Deryugina, Z. P. - 738  
Didenko, A. V. - 268  
Dil'man, V. M. - 101  
Dragomirov, N. I. - 10  
Drobishchenko, N. I. - 505  
Drobysheva, I. M. - 144  
Drui, É. G. - 611  
Dubinin, N. P. - 720  
Dubinina, G. A. - 738  
Dubrovina, T. N. - 509  
D'yachkova, G. I. - 97  
Dzamoeva, Z. I. - 601  
Dzhuraeva, R. Sh. - 8

**E**

- Elyakova, G. V. - 182  
El'yasberg, V. M. - 265  
Enenko, S. O. - 120  
Ermolaeva, V. Yu. - 361  
Ershov, F. I. - 667, 784  
Étingof, R. N. - 237  
Evgen'ev, M. B. - 591  
Evgen'eva, T. P. - 27  
Evnin, D. N. - 214

**F**

- Fadeev, Yu. A. - 628

- Faitel'berg-Blank, V. R. - 539  
Faktor, V. M. - 559  
Fedorov, B. M. - 655  
Fedorov, V. K. - 249, 411  
Fedoseeva, G. E. - 348  
Feizullaev, N. A. - 228  
Finkel'shtein, Z. I. - 614  
Finogenova, N. P. - 162  
Fischer, Eva, - 498  
Fokina, E. S. - 710  
Frank, G. M. - 781  
Frankfurt, O. S. - 24

**G**

- Gaber, I. É. - 735  
Gaidina, G. A. - 111  
Gaitskhoki, V. S. - 667, 784  
Gamaryan, L. S. - 109  
Gar, K. A. - 117, 611  
Gaza, N. K. - 635  
Gel'fand, I. M. - 158  
Gel'shtein, V. I. - 158  
Genkin, A. A. - 639  
Geraskin, P. P. - 438  
Gleizer, S. I. - 689  
Glezer, V. D. - 371  
Glushchenko, T. S. - 262  
Gol'ber, L. M. - 111, 695  
Gol'dburt, S. N. - 431  
Golikov, A. N. - 166  
Golikova, O. P. - 328  
Golovlev, E. L. - 614  
Golovleva, L. A. - 614  
Goncharenko, S. V. - 101  
Gorbovitskii, E. B. - 774  
Gorbunova, A. V. - 525  
Gorokhovskii, N. L. - 169  
Grandberg, I. I. - 655  
Grigalinovich, G. A. - 598  
Grodzinskii, D. M. - 328  
Gromova, K. I. - 411  
Grutenko, E. V. - 66  
Gulidov, M. V. - 172  
Gumanov, L. L. - 332  
Gusev, A. V. - 552  
Gutel'makher, B. L. - 209  
Gutsu, A. P. - 661

## H

Hadžišče, S. - 458

## I

Ignatkov, V. Ya. - 111  
 Jordanskii, A. B. - 321, 679, 703  
 Irzhak, L. I. - 204  
 Isachenkov, V. A. - 30  
 Ivanitskaya, E. A. - 706  
 Ivanov, K. P. - 643  
 Ivanova, I. I. - 619  
 Ivanova, L. I. - 404  
 Ivanova, T. N. - 88

## K

Kabanova, Yu. G. - 732  
 Kachmarchik, É. V. - 204  
 Kalakutskii, L. V. - 68  
 Kan, G. S. - 532  
 Kandelaki, M. G. - 216  
 Kandror, V. I. - 695  
 Kariev, N. N. - 519  
 Kasinov, V. B. - 476  
 Kasinova, G. V. - 476  
 Katsnel'son, Z. S. - 17  
 Kazakova, G. G. - 68  
 Kazan'ev, V. V. - 687  
 Khailov, K. M. - 341  
 Khalemskii, É. N. - 63  
 Khalturin, D. K. - 673  
 Kharkevich, D. A. - 427  
 Khaskin, V. V. - 414  
 Khayutin, V. M. - 275, 397  
 Kheinman, V. A. - 117  
 Khesina, A. Ya. - 348  
 Khodorkovskii, V. A. - 689  
 Khokhryakova, V. S. - 611  
 Kiknadze, I. I. - 585  
 Kind, T. V. - 307, 434  
 Kiselev, O. I. - 667, 784  
 Kislyakov, V. A. - 393  
 Kogan, A. B. - 91, 94, 645  
 Kogan, A. S. - 698  
 Kolenko, O. A. - 259  
 Kolobova, N. N. - 748  
 Kolosov, N. G. - 221  
 Kolosova, M. O. - 679  
 Kol's, O. R. - 124  
 Kol'tsova, A. V. - 246  
 Kompaneets, E. B. - 91  
 Kondrashova, M. N. - 374  
 Kondrat'eva, E. N. - 72  
 Kononova, S. D. - 332  
 Konovalov, V. F. - 755, 759  
 Konstantinova, I. V. - 494  
 Kornilova, V. F. - 563  
 Kornyushin, V. V. - 315

Korochkin, L. I. - 156

Korshunov, E. A. - 652  
 Koshelapov, V. I. - 778  
 Kositsyn, N. S. - 555  
 Kosolapov, V. N. - 265  
 Kossova, G. V. - 124  
 Kostandov, É. A. - 97, 512  
 Kostrova, A. A. - 588  
 Kots, Ya. M. - 259  
 Kovalenko, S. P. - 324  
 Kovanov, V. V. - 528, 774  
 Kozlov, V. A. - 66  
 Kozlov, Yu. P. - 124  
 Kozubov, G. M. - 455  
 Kraevskii, N. A. - 516  
 Krasnokutskaya, M. R. - 466  
 Krass, P. M. - 698  
 Krause, E. G. - 535  
 Kravchenko, V. A. - 38  
 Krokhina, J. M. - 56  
 Kruglikov, R. I. - 256  
 Kruklis, M. V. - 44  
 Krumin', A. R. - 703  
 Krushchov, N. G. - 206  
 Krylov, V. Yu. - 377  
 Kucherenko, R. P. - 243  
 Kulakovskii, É. K. - 141  
 Kul'berg, A. Ya. - 214  
 Kulinich, A. V. - 318  
 Kul'kov, A. P. - 371  
 Kurchavii, G. G. - 649  
 Kurella, G. A. - 120  
 Kurennya, O. N. - 720  
 Kurlapova, L. D. - 720  
 Kurnosov, K. M. - 176  
 Kuznetsov, E. V. - 233  
 Kuznetsov, V. B. - 768  
 Kuznetsova, G. D. - 421

## M

Makarov, P. O. - 431  
 Makarova, N. P. - 473  
 Maksimov, V. N. - 469  
 Maksimovich, N. A. - 130, 137  
 Mamkaev, Yu. V. - 144  
 Manishkina, R. P. - 216  
 Manukhin, B. N. - 447  
 Manukhin, V. N. - 575  
 Marfenin, N. N. - 549  
 Markov, G. S. - 82  
 Markova, L. N. - 692  
 Maslova, M. N. - 240  
 Mass, A. M. - 103  
 Matstsarelli, M. - 281  
 Matyushkin, D. P. - 522  
 Meisel', M. N. - 348  
 Mel'nichuk, P. V. - 444  
 Mel'nik, B. E. - 661  
 Men'shikh, L. K. - 667, 784  
 Menshutkin, V. V. - 166  
 Meshcherskii, R. M. - 114  
 Mezhzherin, V. A. - 573  
 Mikeladze, A. L. - 601  
 Mikhailov, I. G. - 516  
 Mikhailova, A. A. - 212  
 Milanović, M. - 458  
 Minsarinova, B. Kh. - 585  
 Mirakhmedov, A. K. - 151  
 Mirslavov, E. A. - 567  
 Mirzoyan, S. A. - 762  
 Miseiko, G. N. - 585  
 Mkheyyan, É. E. - 762  
 Moiseeva, E. B. - 188, 354  
 Moskal'kova, K. I. - 365  
 Mukhina, N. A. - 692  
 Myslobodskii, M. S. - 421

## L

Laikova, L. I. - 710  
 Lapotyshkina, A. I. - 608, 741  
 Lazareva, N. A. - 114  
 Lebedeva, N. A. - 326  
 Lebedeva, V. A. - 326  
 Leonov, B. V. - 299  
 Leont'ev, V. G. - 237  
 Levashov, V. S. - 727  
 Logvinenko, E. M. - 75  
 Losaberidze, N. Sh. - 563  
 Lotte, V. D. - 126  
 Lubennikova, É. I. - 591  
 Lukoshkova, E. V. - 275  
 Luk'yanenko, V. I. - 438  
 Luk'yantseva, E. N. - 552  
 Lyapkusova, A. Kh. - 377

## N

Nagibina, L. F. - 677  
 Naroditskii, B. A. - 545  
 Naumenko, E. V. - 652  
 Nechaeva, G. A. - 249  
 Neifakh, S. A. - 667, 784  
 Neifel'dt, I. A. - 670  
 Nestaiko, G. V. - 30  
 Nikiforov, Yu. L. - 48, 706  
 Nikitin, D. I. - 345  
 Nikitina, E. T. - 68  
 Nikol'skaya, T. I. - 281  
 Nikol'skii, N. N. - 153  
 Nurks, E. E. - 664

## O

Ochakovskii, Yu. E. - 732

Oksman, T. M. - 528, 774  
Orlov, I. V. - 393  
Ostroumova, M. N. - 101  
Ovehhinnikova, N. A. - 570  
Ozeretskovskaya, N. G. - 209

P

Padaiga, A. - 176  
Panachin, E. F. - 695  
Panchenko, V. K. - 324  
Panov, E. N. - 479  
Parin, V. V. - 655  
Pavlov, V. Ya. - 147  
Pavshiks, E. A. - 59  
Pavulsone, S. A. - 321, 703  
Pekkel', V. A. - 727  
Perel'man, A. E. - 735  
Perov, N. A. - 1  
Petrakovskaya, E. A. - 765  
Petrov, D. F. - 710  
Petrov, R. V. - 212  
Petrovskii, G. V. - 281  
Pevzner, L. Z. - 417  
Plekchikova, E. K. - 56  
Pletsityi, D. F. - 605  
Podvigin, N. F. - 371  
Poglavoz, B. F. - 281  
Poglavova, M. N. - 348  
Polyak, R. Ya. - 787  
Popova, N. A. - 117  
Popova-Latkina, N. V. - 225  
Porshnev, B. F. - 451  
Podrezova, N. A. - 655  
Podmarev, V. I. - 575  
Popova, M. F. - 484  
Pratusevich, Yu. M. - 441  
Prokov'eva-Bel'govskaya, A. A. - 679  
Protsenko, A. E. - 616  
Protsenko, L. D. - 324  
Pshennikova, M. G. - 447

R

Rabotnova, I. L. - 619  
Rachinskii, V. V. - 608, 741  
Radionova, E. A. - 380  
Radzhabli, S. I. - 479  
Raikhlin, N. T. - 516  
Rapoport, I. A. - 48, 706  
Raushenbach, I. Yu. - 156  
Repin, V. S. - 21  
Reunov, A. V. - 134  
Rezhabek, B. G. - 424  
Reznik, L. V. - 240  
Rodionov, I. M. - 259

Rodionov, V. Ya. - 778  
Rodionov, Yu. Ya. - 778  
Roitbak, A. I. - 601  
Roshchina, G. M. - 252  
Rostovtsev, V. N. - 21  
Rubel', L. N. - 88  
Rummel', A. G. - 698

S

Safiyazov, Zh. - 151  
Sagaidakovskii, N. N. - 33  
Sakharova, M. N. - 48  
Samedov, A. Sh. - 735  
Samosudova, N. V. - 781  
Sanzhieva, È. U. - 79  
Sekoyan, È. S. - 762  
Semagin, V. N. - 271  
Senchik, Yu. I. - 622  
Senin, V. M. - 194, 201  
Senina, R. Ya. - 755  
Serikov, I. S. - 755  
Severtsov, A. S. - 185  
Shaabdurakhmanova, G. - 151  
Shabad, L. M. - 348  
Shabadash, A. L. - 729  
Shabadash, S. A. - 729  
Shaforostova, D. D. - 619  
Shagiyan, G. Sh. - 85  
Shamina, Z. B. - 40  
Shapiro, I. M. - 194, 201, 591  
Shapovalov, A. I. - 649  
Shavlovskii, G. M. - 75  
Sheinker, V. Sh. - 494  
Sherstnev, V. V. - 542  
Shevchenko, Yu. V. - 384  
Shkol'nik-Yarros, E. G. - 501  
Shmidt, G. A. - 14  
Shol', V. A. - 505  
Shungskaya, V. E. - 120  
Shur, V. L. - 275  
Shvirst, È. M. - 462  
Simakova, R. A. - 400  
Simutenko, L. V. - 771  
Sindarovskaya, I. N. - 414  
Sinyaya, M. S. - 532  
Skoldinov, A. P. - 427  
Skryabin, G. K. - 614  
Slonim, A. D. - 643  
Smirnov, A. D. - 487  
Smirnov, G. D. - 103  
Smirnova, N. A. - 120  
Smirnova-Zalumi, N. S. - 303  
Smorodintsev, A. A. - 787  
Smushkevich, Yu. I. - 692  
Sokolov, V. E. - 768  
Sonina, R. S. - 397

Sorokin, Yu. I. - 490  
Sotskii, O. P. - 762  
Spasskii, A. A. - 315  
Stekol'nikov, L. I. - 101  
Struckov, A. I. - 400  
Strugovshchikova, L. P. - 75  
Strukova, L. G. - 605  
Strunnikov, V. A. - 594, 716  
Studitskii, A. N. - 334, 338  
Sudakov, K. V. - 625  
Sukhareva-Nemakova, N. N. - 563

Suptel', E. A. - 130  
Surgucheva, N. A. - 616  
Suvorov, N. N. - 692  
Sveshnikov, V. A. - 285  
Svet-Moldavskii, G. Ya. - 85  
Sysoeva, A. F. - 408

T

Tageeva, S. V. - 462  
Tambiev, A. E. - 645  
Tarasenko, N. D. - 52, 724  
Tarasov, V. A. - 720  
Tarusov, B. N. - 124  
Tepelina, O. M. - 101  
Teplokhova, T. N. - 277  
Tikhonenko, T. I. - 545  
Timakov, V. D. - 727  
Timofeeva, L. V. - 97  
Timofeeva, T. A. - 677  
Tkachenko, E. Ya. - 643  
Tkherevskii, V. I. - 259  
Tokin, I. B. - 683  
Travkina, G. L. - 700  
Troshin, A. S. - 153  
Trut, L. N. - 652  
Tsoi, R. M. - 197  
Turpaeva, E. P. - 469

U

Ugolev, A. M. - 252, 664  
Urmanceeva, T. G. - 408  
Uryvaev, L. V. - 667, 784  
Uryvaeva, I. V. - 559  
Usakova, N. A. - 368  
Ushakov, B. P. - 458  
Uzorin, E. K. - 106

V

Vaisman, I. Sh. - 744  
Vardapetyan, S. M. - 209  
Vasil'ev, Yu. M. - 158  
Vavilin, G. I. - 735

Vereiskaya, V. N. - 713  
Vernidub, M. F. - 748  
Vibe, K. G. - 539  
Videlets, I. Yu. - 66  
Vilenkin, B. Ya. - 5  
Vilenkina, M. N. - 5  
Vinetskii, Yu. P. - 318  
Vinnik, T. A. - 713  
Vinogradova, N. A. - 153  
Vishnevskii B. I. - 735  
Vladimirskii, B. M. - 94  
Vlasov, Yu. I. - 277  
Voitsekhovskii, B. L. - 787  
Volkova, T. P. - 281  
Voronin, L. G. - 755, 759  
Voronka, G. Sh. - 417  
Voronkov, M. G. - 598

Vshivtseva, V. V. - 351, 358  
**W**  
Wollenberger, A. - 535  
**Y**  
Yakimenko, M. A. - 643  
Yakovlev, G. M. - 765  
Yaroshevskii, A. Ya. - 252  
Yastrebtsova, N. L. - 771  
Yatsenko, R. M. - 710  
Yurovskaya, G. B. - 126  
**Z**  
Zagorska, N. A. - 40  
Zaguskii, S. L. - 94  
Zaitseva, O. V. - 784

Zakharova, L. A. - 212  
Zaika, V. E. - 473  
Zaitsev, A. V. - 310  
Zaitseva, O. V. - 667  
Zakhvataeva, N. V. - 72  
Zamoskovskii, E. M. - 388  
Zasukhina, G. D. - 192  
Zavarzin, G. A. - 79  
Zavodskaya, I. S. - 243  
Zav'yalov, A. V. - 444  
Zazhirei, V. D. - 494  
Zelchan, G. I. - 598  
Zelenin, A. V. - 679  
Zelenskii, M. A. - 38  
Zhdanov, V. M. - 545, 667, 784  
Zil'ber, Yu. D. - 664  
Zotikov, E. A. - 216

## TABLES OF CONTENTS

### DOKLADY BIOLOGICAL SCIENCES

Volumes 196-201, 1971

(A translation of the Biological Sciences sections of Doklady Akademii Nauk SSSR).

Volume 196, Numbers 1-6 January-February, 1971

Engl./Russ.

#### CYTOTOLOGY

- Electron-Microscope Study of Polytene Chromosomes in the Salivary Glands  
of Larvae of Chironomus plumosus - N. A. Perov and Yu. S. Chentsov ..... 1 1452

#### ECOLOGY

- Vibrations in Water Produced by the Activities of Benthic Marine Invertebrates  
- B. Ya. Vilenkin and M. N. Vilenkina ..... 5 214

#### EMBRYOLOGY

- Fate of Yolk Endoderm Cells in Amphibians Rana ridibunda - R. Sh. Dzhuraeva ..... 8 246  
Paths and Regularities of Interrogation of Organogenesis in the Supraorbital Component  
of the Lateral System in Sturgeon Larvae - N. I. Dragomirov ..... 10 478  
Blastocysts of Bacterian Camel Camelus bactrianus - G. A. Shmidt and V. E. Bondarenko ..... 14 482  
Embryonic Rudiment of the Sheep Adrenal - Z. S. Katsnel'son ..... 17 1483  
Isolation of Dihydrofolate Reductase Polymer from Mammalian Embryos by Gel  
Filtration on a Sepharose 4B Column - V. S. Repin and V. N. Rostovtsev ..... 21 1486

#### EXPERIMENTAL MORPHOLOGY

- Tissue Inhibitors of Cell Division (Chalones) in the Epidermis. Effect on the Cell Cycle  
and Hyperplasia - O. S. Frankfurt ..... 24 237  
Short-Term Culturing of Sea Anemone Ectoderm in Diffusion Chambers - T. P. Evgen'eva ..... 27 463  
Influence of Actinomycin D and Ethionine on the Incorporation of  $C^{14}$ -Amino Acids  
during Development of Tadpoles of Rana terrestreis - V. A. Isachenkov  
and G. V. Nestaiko ..... 30 465

#### GENETICS

- Pyrazolidine Resistance in the Louse Pediculus Humanus, Transmitted by the Female  
and not Associated with Symbionts or Infectious Agent - N. N. Sagaidakovskii ..... 33 693  
Supernumerary Chromosomes and Parallelism of Genetic Variability in Certain  
Dipterans - L. A. Chubareva ..... 35 695  
Homozygosis in Self-Pollinated Lines of Corn and Selection Among Them  
- M. A. Zelenskii and V. A. Kravchenko ..... 38 953  
Principles of Morphogenesis in a Culture of Diploid and Polyploid Tobacco Tissues  
- N. A. Zagorska, Z. B. Shamina, and R. G. Butenko ..... 40 1209  
Supplementary Chromosomes in Gymnosperms (in Picea obovata LDB. as an Example  
- M. V. Kruklis ..... 44 1213  
Puffs Induced by Thiocyanate and a Puff Model for Determining Drug-Affected Enzymes  
- M. N. Sakharova, I. A. Rapoport, M. M. Beknazar'yants, and Yu. L. Nikiforov ..... 48 1217  
Influence of Phytohormones on Increasing the Mutagenic Effectiveness of EMS  
and Nitrosoguanidine Acting on Partially Synchronized Barley Sprouts  
- N. D. Tarasenko ..... 52 1456

#### HISTOLOGY

- Adrenergic Neurons in Intramural Cardiac Ganglia in Mammals - J. M. Krokhina  
and E. K. Plechkova ..... 56 211

## HYDROBIOLOGY

Seasonal Variations in the Number of Zooplankton in the Region of the North Pole

-E. A. Pavshiks . . . . .	59	441
Depth of the Position of the Compensation Point in the Pacific Ocean -É. N. Khalemskii . . . . .	63	445

## IMMUNOLOGY

Effects of Early Thymectomy on Colony-Forming Capabilities of CBA Mice Spleen Cells

-V. A. Kozlov, E. V. Grunenko, and I. Yu. Videlets . . . . .	66	708
--	----	-----

## MICROBIOLOGY

Induction of a Special Type of Development in Actinomyces roseoflavus var. roseofungini in a Medium Containing Fructose -E. T. Nikitina, G. G. Kazakova,

and L. V. Kalakutskii . . . . .	68	448
---------------------------------	----	-----

Fixation of Molecular Nitrogen in Photosynthesizing Bacteria in Relation to Presence of Light and ATP and Character of Exogenous Substrate -N. V. Zakhvataeva and E. N. Kondrat'eva . . . . .

72	698
----	-----

Flavinogenesis in Guanine-Dependent Mutants of the Yeast Candida guilliermondii

-G. M. Shavlovskii, L. P. Strugovshchikova, and E. M. Logvinenko . . . . .	75	701
--	----	-----

A Bacterium which Oxidizes Carbon Monoxide -É. U. Sanzhieva and G. A. Zavarzin . . . . .

79	956
----	-----

## PARASITOLOGY

Copper, Zinc, Cobalt, and Manganese Content in the Bodies of Parasites of Acipenseridae

-V. V. Andreev and G. S. Markov . . . . .	82	486
---	----	-----

Correlation between the Degree of Invasion of Mice by Trichinella spiralis and Inhibition of Transplantation Immunity -I. Yu. Chernyakhovskaya, G. Sh. Shagyan,

and G. Ya. Svet-Moldavskii . . . . .	85	1490
--------------------------------------	----	------

## PHYSIOLOGY

Pyridine Nucleotides of the Cerebral Hemispheres of Rats under the Influence

of Hyperoxia -T. N. Ivanova and L. N. Rubel' . . . . .	88	240
--	----	-----

Conditioned-Reflex Differentiation of Excitation Mosaics Evoked by Direct Electrical

Stimulation of the Visual Cortex -A. B. Kogan and E. B. Kompaneets . . . . .	91	243
--	----	-----

Evaluation of the Redundancy of the System Regulating Cytochrome Oxidase Activity in the Neuron in the Case of Different Functional States -A. B. Kogan,

S. L. Zaguskii, and B. M. Vladimirovskii . . . . .	94	468
--	----	-----

Characteristics of Cortical Potentials Evoked by Weak Auditory Stimuli in Man

-E. A. Kostandov, G. I. D'yachkova, and L. V. Timofeeva . . . . .	97	471
---	----	-----

Inhibition of the Hypocalcemic Effect of Tyrocalcitonin by Its Acetylated Derivative

-L. I. Stekol'nikov, M. N. Ostroumova, O. M. Tepelina, S. V. Gonsharenko, and V. M. Dil'man . . . . .	101	475
---	-----	-----

Cortical Control over Excitation Transmission in the Lateral Geniculate Body

of the Rabbit -A. M. Mass and G. D. Smirnov . . . . .	103	729
---	-----	-----

Microelectrophoretic Study of RNA in the Simplest Neuronal System Elements

of <u>Limnaea stagnalis</u> -E. K. Uzorin . . . . .	106	733
---	-----	-----

The Role of the Pallidum and Hippocampus in Formation of the Functional System

of Motor Behavior -L. S. Gambaryan . . . . .	109	984
--	-----	-----

State of Inhibitory Processes in the Spinal Cord during Thyrotoxicosis -L. M. Gol'ber,

G. A. Gaidina, and V. Ya. Ignatkov . . . . .	111	987
--	-----	-----

Corticofugal Control of the Neuronal Activity of the External Geniculate Body

-N. A. Lazareva and R. M. Meshcherskii . . . . .	114	990
--	-----	-----

The Biochemical Mechanism of Insect Resistance to DDT at High Temperatures

-K. A. Gar, V. A. Kheinman, and N. A. Popova . . . . .	117	1241
--	-----	------

Membrane Potential of Cultured Nerve Cells -N. A. Smirnova, G. A. Kurella,

V. E. Shungskaya, and S. O. Enenko . . . . .	120	1245
--	-----	------

Relationship of the Lability of the Nerve Fiber to the Antioxidant Activity of Lipids

of the Substrate -G. V. Kossova, Yu. P. Kozlov, O. R. Kol's, and B. N. Tarusov . . . . .	124	1481
--	-----	------

## VIROLOGY

Leukosis-Like Virus in Cell Culture Transformed with Blood of Leukemic Patients —O. G. Andzharidze, V. D. Lotte, and G. B. Yurovskaya . . . . .	126	217
Role of the Reticuloendothelial System in the Development of Some Experimental Viral Infections—N. A. Maksimovich and E. A. Suptel' . . . . .	130	451
Effect of Systemic Virus Infection on the Free Radical Composition of Leaves of the Plant Host—A. V. Reunov . . . . .	134	705
Interaction of Certain Viruses with Peritoneal Macrophages—E. A. Suptel' and N. A. Maksimovich . . . . .	137	959

## ZOOLOGY

Neurohormonal Control of the Chromatophores in Mysidians—É. K. Kulakovskii . . . . .	141	234
Multiple Formation of Seminal Sacs and Their Papillae in the Acoelous Turbellarian <u>Convoluta convoluta</u> (Abildgaard)—Yu. V. Mamkaev and I. M. Drobysheva . . . . .	144	1474
On the Physiology of Feeding in <u>Euphausia superba</u> —V. Ya. Pavlov . . . . .	147	1477

Volume 197, Numbers 1-6

March-April, 1971

## CYTOLOGY

An Ultrastructural Study of <u>Verticillium dahliae</u> —Zh. Safiyazov, A. K. Mirakhmedov, and G. Shaabdurakhmanova . . . . .	151	203
The Inhibiting Influence of Urea on the Stimulation of Sugar Transport in Muscle Fibers —N. A. Vinogradova, N. N. Nikol'skii, and A. S. Troshin . . . . .	153	1183
Change in the DNA Content of the Large Pyramids of the Rat Cerebral Cortex in Postnatal Ontogenesis—I. Yu. Raushenbakh, L. I. Korochkin, and D. K. Belyaev . . . . .	156	1187
Initiation of DNA Synthesis in Cultures of Mouse Embryo Fibroblast-Like Cells during the Action of Substances Causing Disorders in Spindle Formation —Yu. M. Vasil'ev, I. M. Gel'fand, and V. I. Gel'shtein . . . . .	158	1425

## ECOLOGY

Production and Utilization of Food Energy in the Benthic Biocoenoses of Two Northern Lakes—A. F. Alimov and N. P. Finogenova . . . . .	162	460
Model Study of Production Process in the Population of the Gastropod Mollusk <u>Epheria</u> <u>turrita</u> (A. Adams)—A. N. Golikov and V. V. Menshutkin . . . . .	166	944

## EMBRYOLOGY

Placentoma Development in Fine-Wooled Sheep—N. L. Gorokhovskii . . . . .	169	246
Effect of Oxygenation Conditions during Incubation on Embryonic Development of Some Cyprinidae—M. V. Gulidov . . . . .	172	497
Morphogeny of the Placenta of the Domestic Pig <u>Sus scrofa</u> and Its Characteristics —A. Padaiga and K. M. Kurnosov . . . . .	176	1229
Levels of Subcellular Differentiation Corresponding to Diapause and Activation of the Sable ( <u>Martes zibellina</u> ) Embryo—Yu. B. Baevskii . . . . .	179	1458

## EXPERIMENTAL MORPHOLOGY

Ultrastructure of Muscle Tissue in Denervation Atrophy—G. V. Elyakova . . . . .	182	488
---	-----	-----

## EVOLUTIONARY MORPHOLOGY

The Mechanism of Food Capture in Tailed Amphibians—A. S. Severtsov . . . . .	185	728
--	-----	-----

## ENDOCRINOLOGY

Differential Identification and Some Morphological Features of Cells of the Preadenohypophysis of Gobies—E. B. Moiseeva . . . . .	188	501
--	-----	-----

## GENETICS

Repair of Some Genetic Lesions in an RNA-Containing Virus and Its Dependence on Cell Species—G. D. Zasukhina and V. V. Chekova . . . . .	192	457
---	-----	-----

Experiments in Hybridization of Somatic Cells of Mammals and Spermatozoa.		
Penetration and Early Morphological Changes in Spermatozoa of a Stallion		
in the Cells of a Chinese Hamster—V. M. Senin and I. M. Shapiro .....	194	698
Effect of Methyl Sulfate on Mutation Frequency of Genes S and n in the Carp		
( <i>Cyprinus carpio L.</i> )—R. M. Tsoi .....	197	701
Nuclear Changes Occuring in Various Mammalian Sperm inside Cells Cultured in Vitro		
—B. M. Senin and I. M. Shapiro .....	201	941
<b>HISTOLOGY</b>		
The Ontogenesis of Cat Hemoglobin—L. I. Irzhak and É. V. Kachmarchik .....	204	695
Autoradiographic Study of $H^3$ -Tryptophan Incorporation into Loose Connective Tissue		
—N. G. Khrushchov .....	206	1429
<b>HYDROBIOLOGY</b>		
Use of Radiocarbon Method for Studying Trophic Interrelations in Plankton		
—S. M. Vardapetyan, B. L. Gutel'makher, and N. G. Ozeretskaya .....	209	705
<b>IMMUNOLOGY</b>		
Immunoglobulin Synthesis in Mixed Cultures of Syngeneic Cells from Different Lymphoid		
Tissues—A. A. Mikhailova, R. V. Petrov, and L. A. Zakharova .....	212	209
Stimulation of the Primary Immune Response by Sera from Partially Hepatectomized		
Animals—D. N. Evnin and A. Ya. Kul'berg .....	214	711
Antigen of New Specificity in Granulocytes—E. A. Zotikov, R. P. Manishkina,		
and M. G. Kandelaki .....	216	948
<b>MORPHOLOGY</b>		
Morphology of the Thymus at Certain Stages in the Ontogenesis of the Salmon—A. V. Belova	218	1214
Afferent Elements of Ganglia of the Ileocecal Region—N. G. Kolosov .....	221	1441
On the Development of the Human Cerebral Cranium in Utero—N. V. Popova-Latkina . . .	225	1445
<b>PARASITOLOGY</b>		
Mechanism of Migration of Cyclocoelidae (Trematoda) Metacercariae to the Localization		
Site in the Definitive Host and the Probable Routes of Elimination of Eggs		
of Mature Worms—N. A. Feizullaev .....	228	734
<b>PHYSIOLOGY</b>		
Extraprimary Negative Component of the Optic Potential—F. A. Ata-Muradova		
and L. M. Chuppina .....	230	238
Dependence on Locomotor Activity of the Daily Rhythm of Mitoses in the Crystalline		
Lens Epithelium of <i>Rana temporaria L.</i> —V. Ya. Brodskii, E. V. Kuznetsov,		
and Yu. D. Chugunov .....	233	242
$Na^+$ Binding by Phospholipids of the Outer Segments of the Retina during Illumination		
—V. G. Leont'ev, A. L. Berman, and R. N. Étingof .....	237	490
Functional and Biochemical Changes in the Rat Brain in the Initial Stage of Action		
of Hyperbaric Oxygen—M. N. Maslova and L. V. Reznik .....	240	494
Structural and Functional Changes in the Medial Area of the Anterior Hypothalamus		
in Animals during Application of an Extraordinary Stimulus and Administration		
of Dopa—I. S. Zavodskaya and R. P. Kucherenko .....	243	732
The Ultralow Frequency Spectrum of Electrical Phenomena in the Brain		
—N. A. Aladzhalova and A. V. Kol'tsova .....	246	973
Distribution of Acid and Alkaline RNAase and Alkaline RNAase Inhibitor in Different		
Regions of the Rat Brain—N. N. Demin, G. A. Nechaeva, and V. K. Fedorov .. .	249	977
Adaptive Changes in Sodium, Potassium, and Water Consumption in Acute Experimental		
Nephritis in Rats—A. Ya. Yaroshevskii, A. M. Ugolev, and G. M. Roshchina .. .	252	980
Effect of Electroshock on Memory and Glio-Neuronal Relationships in Rat Brain		
—M. M. Aleksandrovskaia and R. I. Kruglikov .....	256	1216

The Functional Significance of the Sympathetic Vasodilator Effect in Skeletal Muscle			
-N. A. Berdina, O. A. Kolenko, Ya. M. Kots, I. M. Rodionov, and V. I. Tkherevskii	259	1218	
Activity of Proteolytic Enzymes of Various Regions of the Rat Brain during Natural			
Sleep and Deprivation of Its Paradoxical Phase-T. S. Glushchenko and N. N. Demin	262	1222	
Investigation and Simulation of the Dynamics of Development of Muscular Effort			
under the Influence of Motoneurons, as Exemplified by the Abductor Dactylopodiate			
Muscle in the River Crayfish <u>Actacus leptodactylus</u> -V. M. El'yasberg			
and V. N. Kosolapov . . . . .	265	1225	
Fluorescence of Retzius Cells of the Medicinal Leech Vitaly Stained with Acridine			
Orange-G. N. Akoev and A. V. Didenko . . . . .	268	1448	
Wedensky's Frequency Pessimum after Irradiation of the Spinal Cord and during			
Compensation-V. N. Semagin . . . . .	271	1452	
Detection and Functional Properties of Nonmyelinated Afferent Fibers in the Inferior			
Cardiac Nerve-V. M. Khayutin, V. L. Shur, and E. V. Lukoshkova . . . . .	275	1456	
<b>VIROLOGY</b>			
Specialization of Bromegrass Mosaic Virus-Yu. I. Vlasov and T. N. Teploukhova . . . . .	277	205	
Study of Bacteriophage T2 Tail-Sheath Protein-T. I. Nikol'skaya, G. V. Petrovskii,			
M. Matstsarelli, T. P. Volkova, and B. F. Poglazov . . . . .	281	708	
<b>ZOOLOGY</b>			
A Plunger Mechanism for Expulsion of Water in <u>Chaetopterus variopedatus</u> (Polychaeta			
Annelida) - T. S. Aksyuk and V. A. Sveshnikov . . . . .	285	724	

Volume 198, Numbers 1-6        May-June, 1971

#### EMBRYOLOGY

Detection of Serotonin in Rat Blastocysts by the Microspectrofluorimetry Method			
-B. V. Leonov and A. Yu. Budantsev . . . . .	299	734	
Heterochrony in the Oogenesis of the Baikal Cisco ( <u>Coregonus autumnalis migratorius</u> )			
-N. S. Smirnova-Zalumi . . . . .	303	989	

#### ENDOCRINOLOGY

Dynamics of the Secretory Activity of the Neurosecretory Cells of the Subesophageal			
Ganglion in Different Geographic Races of <u>Orygia antiqua</u> L.-T. V. Kind . . . . .	307	254	

#### EVOLUTIONARY MORPHOLOGY

Study of the Structure and Function of the Thyroid in Females of the Lapland			
Whitefish ( <u>Coregonus lavaretus</u> L.) during Annual and Biannual Spawning			
-A. V. Zaitsev . . . . .	310	1228	
Morphological Evolution of the Gonads in Hymenolepididae and Dilepididae			
-A. A. Spasskii and V. V. Kornyushin . . . . .	315	1232	

#### GENETICS

The Mechanism of Integration of Donor DNA during Phage Transformation			
-Yu. P. Vinetskii and A. V. Kulinich . . . . .	318	211	
Phenotypic Variability and Reproduction of Satellited Chromosomes in <u>Allium</u>			
<u>fistulosum</u> L.-A. B. Jordanskii, S. A. Pavlsone, and N. S. Badaev . . . . .	321	215	
Mutagenic Action of Ethylenimine Derivatives of Pyrimidine on <u>Aspergillus nidulans</u>			
-S. P. Kovalenko, V. K. Panchenko, L. D. Protsenko, and Yu. I. Bogodist . . . . .	324	437	
A New Promising Form of <u>Solanum verrucosum</u> Schlechtd-N. A. Lebedeva			
and V. A. Lebedeva . . . . .	326	440	
Disturbance in DNA-Matrix and Radiation Disease of Plants-O. P. Golikova			
and D. M. Grodzinskii . . . . .	328	1207	
Mutagenic Effect of Alkyl Phosphates on Phage T4B and Alkylation of Phage DNA			
-S. D. Kononova and L. L. Gumanov . . . . .	332	1442	

## HISTOLOGY

Chromatin Displacement during Spermatogenesis in the Crayfish and Possible Evolutionary Significance of This Phenomenon—A. N. Studitskii . . . . .	334	1203
Migrations of Chromatin during Nuclear Secretion in the Diferent Gland of the Shore Crab ( <u>Carcinus maenas</u> ) and the Evolutionary Significance of This Phenomenon—A. N. Studitskii . . . . .	338	1439

## HYDROBIOLOGY

Utilization of Dissolved Organic Matter in Sea Water by Echinoderms and Mollusks—K. M. Khailov . . . . .	341	443
--	-----	-----

## MICROBIOLOGY

A New Soil Microorganism — <u>Renobacter vacuolatum</u> Gen. et. Sp. n.—D. I. Nikitin . . . . .	345	447
Metabolism of Benz(a)pyrene by Various Soil Microflora and Isolated Microorganisms—M. N. Poglazova, G. E. Fedoseeva, A. Ya. Khesina, M. N. Meisel', and L. M. Shabad . . . . .	348	1211

## MORPHOLOGY

Stages of Development of the Receptor Tuft in the Esophageal Ganglia of Lamb Fetuses and Sheep—V. V. Vshivtseva . . . . .	351	232
Morphological Comparison of the Pituitary Glands of <u>Gobius melanostomus</u> Pall. and <u>Gobius Batrachocephalus</u> Pall., Spawning Intermittently and Simultaneously—E. B. Moiseeva . . . . .	354	467
Morphologic Properties of the Afferent Innervation of Autonomic Ganglia—V. V. Vshivtseva . . . . .	358	712
Morphology of the Connection of the Ventro-Basal Complex of the Thalamus with the First and Second Somatosensory Areas of the Cortex—V. Yu. Ermolaeva . . . . .	361	716
Adaptive Changes of the Retina in the Ontogenesis of <u>Gobius melanostomus</u> (Pall.)—K. I. Moskal'kova . . . . .	365	1225

## PHYSIOLOGY

Influence of Acute Hypoxia on the Organism of Animals with "Denervated" Sinocarotid Zones—N. A. Agadzhanyan and N. A. Usakova . . . . .	368	236
Relationship of Neuronal Responses in the External Geniculate Body of a Cat to Illumination—V. D. Glezer, A. P. Kul'kov, and N. F. Podvigin . . . . .	371	240
Succinic Acid in Skeletal Muscle during Intense Activity and Rest—M. N. Kondrashova and N. R. Chahovets . . . . .	374	243
Method of Analyzing the Reaction of a Neuron to a Stimulus—V. Yu. Krylov and A. Kh. Lyapkusova . . . . .	377	247
Transformation of the Characteristics of Neuronal Impulse Activity in the Auditory System—E. A. Radionova . . . . .	380	250
Correlation between Changes in Functional Systems of the Body during Exposure of Intact and Anesthetized Animals to Increasing Hypoxia—N. A. Agadzhanyan and Yu. V. Shevchenko . . . . .	384	471
Electron-Microscope Investigation of Motoneurons during Prolonged Excitation of Afferent Fibers—E. M. Zamoskovskii and Yu. A. Darinskii . . . . .	388	475
Hydrodynamic Reactions between Sections of the Vestibular Apparatus—V. A. Kislyakov and I. V. Orlov . . . . .	393	479
Time-Dispersion in Afferent Pathways and Realization of Vasomotor Reflexes in Spinal-Cord Preparations—R. S. Sonina and V. M. Khayutin . . . . .	397	483
Histochemical Investigation of the Activity of Certain Enzymes in Various Phases of the Cardiac Cycle—A. I. Strukov, R. A. Simakova, E. B. Babskii, and E. V. Bogdanova . . . . .	400	486
Interaction of Efferent and Afferent Excitations in the Intercalary Neurons of the Motor Cortex—L. I. Ivanova . . . . .	404	720

Electrical Activity of the Cortex and Deep Brain Structures in Waking Baboons —A. F. Sysoeva and T. G. Urmancheeva . . . . .	408	724
Effect of Growth Hormone on the Behavior and Certain Morphological and Biochemical Indicators in the Progeny of Rats of the Wistar Strain—V. K. Fedorov and K. I. Gromova . . . . .	411	727
Thermokinetics of the Action of ATP on Intact Muscle Fibers of Rats Adapted to Various Temperatures—V. V. Khaskin and I. N. Sindarovskaya . . . . .	414	730
Total Content of Protein and Amount of Basic Proteins in the Neurons and Neuroglia of the Supraoptical and Red Nuclei of the Rat Brain during Natural Sleep and Deprivation of the Paradoxical Phase of Sleep—G. Sh. Voronka, N. N. Demin, and L. Z. Pevzner . . . . .	417	974
Degree of Indifference of Conditioned Stimuli: Photic Self-Stimulation —M. S. Myslobodskii and G. D. Kuznetsova . . . . .	421	978
Behavior of a Mechanoreceptor Neuron in an Artificial Feedback Circuit —B. G. Rezhabek . . . . .	424	981
Effect of Lipoidophilic Radicals in the Molecules of Curare-like Agents on the Mechanism of Their Action—D. A. Kharkevich and A. P. Skoldinov . . . . .	427	985
Measurement of Reaction Time to the Appearance and Disappearance of Brief Sensory (Auditory) Stimuli for the Purpose of Measuring the Duration of Sensation —S. N. Gol'dburt and P. O. Makarov . . . . .	431	1235
Regulation of the Activity of Neurosecretory Cells of the Subesophageal Ganglion of <u>Orygia antiqua</u> L.—T. V. Kind . . . . .	434	1239
Dynamics of the Formation of the Fractional Composition of Hemoglobin in the Early Ontogenesis of the Russian Sturgeon ( <u>Acipenser guldenstadi</u> Brandt) —V. I. Luk'yanenko and P. P. Geraskin . . . . .	438	1242
Influence of Enteral Introduction of Supplementary Factors of Nutrition (Methionine, Glutamic Acid, Vitamins of the B-Complex, and Yeasts) on the Brain Circulation during Chronic Mental Fatigue in Children—Yu. M. Pratusevich and L. A. Alekseeva . . . . .	441	1245
Correlation of Activity of Adjacent Neurons of the Somatosensory Zone of the Cat Cortex —P. V. Mel'nichuk and A. V. Zav'yalov . . . . .	444	1471
Dynamics of Noradrenalin Concentration in the Rat Myocardium in Altitude Hypoxia —M. G. Pshennikova and B. N. Manukhin . . . . .	447	1474
<b>ZOOLOGY</b>		
The Second Signal System as a Diagnostic Troglodytid-Hominid Threshold —B. F. Porshnev . . . . .	451	228

Volume 199, Numbers 1-6 July-August, 1971

**CYTOTOLOGY**

Cell Ultrastructure of Endosperm and Sporoderm in Ovule of Common Pine <u>Pinus silvestris</u> —G. M. Kozubov . . . . .	455	205
Tissue Heat Tolerance of Planarians and Asellids of Lake Ohrid in Yugoslavia —B. P. Ushakov, M. Milanović, and S. Hadžišće . . . . .	458	208
Quantitative Morphometry of Cytoplasmic Membranes as Exemplified in the Lamellar Structures of Chloroplasts—S. V. Tageeva, Kh. A. Abdullaev, and É. M. Shvirst .	462	1171
Change of Mitotic Activity after Blocking Protein Synthesis with Puromycin —I. A. Alov, M. E. Aspiz, and M. R. Krasnokutskaya. . . . .	466	1417

**ECOLOGY**

Relative Effects of Certain Factors on a Population of the Cirripede <u>Balanus improvisus</u> and the Composition of a Biocenosis of Marine Overgrowth —E. P. Turpaeva and V. N. Maksimov . . . . .	469	212
---	-----	-----

## EXPERIMENTAL MORPHOLOGY

Biological Meaning of Parameters Contained in Bertalanffy's Growth Equation

—V. E. Zaika and N. P. Makarova ..... 473 242

## GENETICS

Retention of Radiation-Induced Deformations in Vegetative Offspring of Lemna gibba

—V. B. Kasinov and G. V. Kasinova ..... 476 460

Description of the Karyotypes of Certain Species of Birds of the USSR

—N. Sh. Bulatova, E. N. Panov, and S. I. Radzhabli ..... 479 1420

## HISTOLOGY

Effect of Regenerating Muscle Tissue on the Colony-Forming Ability of Bone Marrow

in the Irradiated Mouse —M. F. Popova ..... 484 457

Modifying Effect of Cystamine on Some Mutagenic Influences on the Human Organism

—A. D. Smirnov ..... 487 937

## HYDROBIOLOGY

Trophic Role of Microflora in the Coral Reef Biocenosis —Yu. I. Sorokin, .....

490 1424

## IMMUNOLOGY

Investigations on the Effects of Ribonuclease on Antibody Synthesis during Secondary

In Vitro and In Vivo Immune Responses —I. V. Konstantinova, V. D. Zazhirei,

and V. Sh. Sheinker ..... 494 948

## MICROBIOLOGY

Application of Radioactive Carbon C<sup>14</sup> to Determine Efficiency of Energy Transferin a Food Chain: Glucose—Azotobacter agile—Tetrahymena pyriformis

—Eva Fischer ..... 498 940

Neurons of Cat Retina —E. G. Shkol'nik-Yarros .....

501 238

## PARASITOLOGY

Development of the Causative Agent of Setariosis of Marals in the Body of the

Bloodsucking Fly Haematobia stimulans —V. A. Shol' and N. I. Drobishchenko, .....

505 503

## PHYSIOLOGY

Triggering and Neurochemical Mechanisms of Temperature Regulation in Hyperoxia

—I. I. Antonov ..... 507 245

Role of the Cerebral Cortex in Regulating the Permeability of the Blood-Brain Barrier

for Ca<sup>45</sup> in Irradiation with Small Doses of X Rays —T. N. Dubrovina .....

509 493

Potentials Induced in the Human Cortex by Emotional Visual Stimuli —É. A. Kostandov

and Yu. L. Arzumanov ..... 512 497

Biogenic Monoamines in Ashkinazi (Gyurtl) Cells of the Thyroid Gland

—N. A. Kraevskii, N. T. Raikhlin, and I. G. Mikhailov .....

516 501

Some Characteristics of Respiratory Regulation in Natives of High Mountain Regions

—I. S. Breslav and N. N. Kariev ..... 519 730

Postsynaptic Potentials in Adjacent Synapses for Some Multiply Innervated (Tonic)

Fibers in Eye Muscles —D. P. Matyushkin .....

522 733

Influence of Limitation of Mobility on the Content and Nucleotide Composition of RNA

and on the Protein Content in Motor Neurons of the Anterior Horns of the Spinal

Cord —A. V. Gorbunova .....

525 976

Ischemic Toxin —T. M. Oksman, M. V. Dalin, and V. V. Kovanov .....

528 980

Certain Dynamic Characteristics of the PD-Receptor Organ in the Crayfish Astacusleptodactilus —V. S. Burdanov, G. S. Kan, and M. S. Sinyaya .....

532 1209

Changes in the Content of Certain Products of Glycolysis in the Myocardium of the Frog

in Various Phases of the Cardiac Cycle —E. G. Krause, I. Beierdorfer,

A. Wollenberger, E. V. Bogdanova, and E. B. Babskii .....

535 1212

<b>Effects of Short-Wave Ultraviolet Irradiation on the Absorptive Function of the Small Intestine</b> — K. G. Vibe, V. I. Alekseev, and V. R. Faitel'berg-Blank . . . . .	539	1453
<b>Study of the Chemical Characteristics of Synaptic Transmission in Cortical Neurons by the Microionophoretic Method</b> — V. V. Sherstnev . . . . .	542	1456
<b>VIROLOGY</b>		
<b>Reproduction of Tobacco Mosaic Virus in Isolated Mitochondria of Rat Liver</b> — V. M. Zhdanov, T. I. Tikhonenko, A. F. Bocharov, and B. A. Naroditskii . . . . .	545	944
<b>ZOOLOGY</b>		
<b>Integration of Colonies of the Hydroid Polyp <i>Dynamena pumila</i> (Hydrozoa, Leptolida).</b> Reaction of the Colonies to Freezing in Winter — N. N. Marfenin . . . . .	549	489
<b>Pellucidhaptor (Monogenea) in Eurasia</b> — A. V. Gusev and E. N. Luk'yantseva . . . . .	552	1450

Volume 200, Numbers 1-6 September-October, 1971

**CYTOTOLOGY**

<b>Ultrastructure of Synaptic Boutons of Dendrites of the Central Nervous System</b> — N. S. Kositsyn . . . . .	555	215
<b>Rate of DNA Replication in Diploid and Tetraploid Nuclei of Regenerating Mouse Liver</b> — I. V. Uryvaeva and V. M. Faktor . . . . .	559	218
<b>Effect of Trypaflavine on Multiplication and Submicroscopic Structure of <i>Crithidia oncopelti</i> Grown in Actively Aerated Cultures</b> — N. N. Sukhareva-Nemakova, V. F. Kornilova, and N. Sh. Losaberidze . . . . .	563	963
<b>The Possible Participation of the Epidermis in the Biosynthesis of Hormonal Substances. Data of Electron Microscopy</b> — E. A. Mirslavov . . . . .	567	1445

**ECOLOGY**

<b>Experimental Study of the Biological Peculiarities and Reproductive Isolation of Common and Transcaspian Voles</b> — N. A. Ovchinnikova . . . . .	570	712
<b>The Principle of Conservation of Variability</b> — V. A. Mezhzherin . . . . .	573	1222
<b>Influence of Serotonin on Activation of Protein Synthesis in Sea Urchin Ova after Fertilization</b> — G. A. Buznikov, V. N. Manukhin, and V. I. Podmarev . . . . .	575	1254

**EVOLUTIONARY MORPHOLOGY**

<b>Peculiarities of the Structure and Function of the Joints and Tendon-Ligament Apparatus of the Pelvic Bones and Extremities of Saltigrade Birds</b> — Zakir Ametov . . . . .	578	492
---	-----	-----

**EXPERIMENTAL MORPHOLOGY**

<b>Hormonal Effect on Rate of Vitellogenesis and Fecundity of <i>Tilapia mossambica</i> Peters</b> — M. N. Chistova . . . . .	581	1479
---	-----	------

**GENETICS**

<b>Extra Microchromosomes in Chironomids</b> — G. N. Miseiko, I. I. Kiknadze, and B. Kh. Minsarinova . . . . .	585	709
<b>The Ratio of Sexes in Man during the Embryonic Period and among the Newborn</b> — N. P. Bochkov and A. A. Kostrova . . . . .	588	973
<b>Autoradiographic Investigation of the Replication of Polytene Chromosomes of the Salivary Glands. Chronology of DNA Replication during Inversion and in Interspecies Hybrids</b> — M. B. Evgen'ev, É. I. Lubennikova and I. M. Shapiro . . . . .	591	1215
<b>Sex-Linked Inheritance of Characters Controlled by Autosomal Genes in the Silkworm</b> — V. A. Strunnikov . . . . .	594	1218

**HISTOLOGY**

<b>Inhibitory Effect of Certain Silicon Compounds on the Growth of Malignant-Tumor Cells</b> — M. G. Voronkov, G. A. Grigalinovich, and G. L. Zelchan . . . . .	598	967
---	-----	-----

Contacts between Axonal Terminals and Oligodendrites in the Cerebral Cortex —A. L. Mikeladze, A. I. Roitbak, and Z. I. Dzamoeva . . . . .	601	970
Morphological Changes in the Central Nervous System Developing in Animals Immunized with Purified Anatoxins—D. F. Pletsityi and L. G. Strukova . . . . .	605	1211
<b>MICROBIOLOGY</b>		
Localization of Oxidation of n-Paraffins by Yeasts—V. V. Rachinskii, E. G. Davidova, and A. L. Lapotyshkina . . . . .	608	457
Degradation of DDT in Soil under the Influence of Microorganisms—É. G. Drui, K. A. Gar, and V. S. Khokhryakova . . . . .	611	977
On a Correlative Relationship between the Taxonomic Position of Soil Mycobacteria and Their Ability to Transform Aromatic Hydrocarbons—G. K. Skryabin, E. L. Golovlev, L. A. Golovleva, L. V. Andreev, and Z. I. Finkel'shtein . . . . .	614	1224
Mycoplasma-Like Bodies in Cells of Mint Infected with Bolting—N. A. Surgucheva and A. E. Protsenko . . . . .	616	1447
Change in Chemical Composition of Cells Related to Inequality of Growth in the Exponential Phase of a Periodic Culture of <u>B. megaterium</u> —D. D. Shaforostova, I. I. Ivanova, and I. L. Rabotnova . . . . .	619	1449
<b>MORPHOLOGY</b>		
Relationship of Neurosecretory Cells of the Supraoptic Nucleus and Capillaries —Yu. I. Senchik . . . . .	622	745
<b>PHYSIOLOGY</b>		
Electroanesthesia, Convulsive Reaction, and Analgesia—K. V. Sudakov, Yu. B. Abramov, and T. P. Bunina . . . . .	625	496
Analysis of Unconditioned Pain Excitation at the Neuronal Level of the Somatosensory Cortex—Yu. A. Fadeev . . . . .	628	500
Interaction of Descending Effects Caused by Stimulation of Motor Cortex and Some Conducting Pathways of the Spinal Cord—E. T. Blagodatova . . . . .	632	748
Cortico-Visceral Disturbances in Dogs from the Injection of Acetylcholine into the Limbic Cortex of the Brain—N. K. Gaza . . . . .	635	999
Variations in the Asymmetry of Duration of Electroencephalogram Phases and Its Connection with Respiratory Rhythm—A. A. Genkin . . . . .	639	1003
Increase in Heat Production of Muscle Contractions from Effect of Noradrenalin —M. A. Yakimenko, E. Ya. Tkachenko, K. P. Ivanov, and A. D. Slonim . . . . .	643	1007
Structure of Functional Neuron Groups in the Visual Cortex of Rat Brain —A. B. Kogan and A. E. Tambiev . . . . .	645	1242
Interaction of Monosynaptic Influences on the Alpha-Motor Neurons of the Cat during Supraspinal and Afferent Stimuli—G. G. Kurchavii and A. I. Shapovalov . . . . .	649	1246
Function of the Adrenal Cortex and Its Seasonal Variations in Silver-Black Foxes ( <i>Vulpus fulvus</i> Desm.)—E. V. Naumenko, L. N. Trut, E. A. Korshunov, and D. K. Belyaev . . . . .	652	1249
Myorelaxation of Animals by the Introduction of 3,5-Dimethyl-4-bromopyrazole and the Influence of Stimulation of the Extracardial Nerve on the Hearts under Conditions—V. V. Parin, B. M. Fedorov, I. I. Grandberg, Yu. M. Batulin, and N. A. Podrezova . . . . .	655	1252
Phylo-Ontogenetic Regularities of Maturation of the Corticopetal Projections of the Visual Cortex—F. A. Ata-Muradova and T. I. Belova . . . . .	657	1483
Influence of Intermedin on the Bioelectric Activity of Certain Nuclei of the Anterior and Posterior Regions of the Hypothalamus—B. E. Mel'nik and A. P. Gutsu . . . . .	661	1487
Influence of Various Diets on the Absorption in the Intestine of Free Glucose and Glucose Formed in the Membrane Hydrolysis of Maltose and Starch—E. E. Nurks, Yu. D. Zil'ber, and A. M. Ugolev . . . . .	664	1490

## VIROLOGY

Synthesis of Infectious Virus Ribonucleoproteins in Isolated Mitochondria -F. I. Ershov, V. S. Gaitskhoki, O. I. Kiselev, L. K. Men'shikh, O. V. Zaitseva, L. V. Uryvaev, S. A. Neifakh, and V. M. Zhdanov . . . . .	667	1452
--	-----	------

## ZOOLOGY

Reproduction and Moulting in Hemichelidon griseisticta Swinh. (Muscicapinae, Aves) -I. A. Neifel'dt. . . . .	670	485
Effect of the Duration of the Parr Period on the Growth of Pacific (Genus <u>Oncorhynchus</u> ) and Atlantic Salmon (Genus <u>Salmo</u> ) -D. K. Khalturin . . . . .	673	488
True Hosts of <u>Aspidogaster limacoides</u> Diesing, 1834 (Trematoda, Aspidogastrea) -L. F. Nagibina and T. A. Timofeeva . . . . .	677	742

Volume 201, Numbers 1-6 November-December, 1971

## CYTOLOGY

Detection of Specific Areas in Heterochromatin by Means of Sarcolysin-Acridine -A. B. Iordanskii, A. A. Prokof'eva-Bel'govskaya, N. S. Badaev, M. O. Kolosova, and A. V. Zelenin . . . . .	679	213
Time Sequence of Events in Hepatocytes of the Irradiated and Unirradiated Regenerating Liver -I. B. Tokin . . . . .	683	465
Mitotic-Apparatus Protein Synthesis in a Fibroblast Culture from the Chinese Hamster -V. V. Kazan'ev . . . . .	687	711

## ECOLOGY

Experimental Determination of Geomagnetic Perception in the European Eel -S. I. Gleizer and V. A. Khodorkovskii . . . . .	689	964
--	-----	-----

## EMBRYOLOGY

Effect of the Products of Enzymatic Conversion of Tryptamine on Fertilized Sea Urchin Ovicells -L. N. Markova, G. A. Buznikov, N. A. Mukhina, Yu. I. Smushkevich, and N. N. Suvorov . . . . .	692	754
---	-----	-----

## ENDOCRINOLOGY

Synthesis of DNA, RNA, and Protein in the Liver of Partially Hepatectomized Rabbits at Different Stages of Thyroid Toxicosis -E. F. Panachin, L. M. Gol'ber, and V. I. Kandror . . . . .	695	758
Possibility of Enhancing the Endogenous Inactivation of Corticosteroid Hormones -A. G. Rummel', P. M. Krass, and A. S. Kogan . . . . .	698	1004
Effect of Pituitary Hormones and Elevated Temperature on Replenishment of Oocytes in the Ruff, <u>Acerina cernua</u> L. (Teleostei) -G. L. Travkina . . . . .	700	1006

## GENETICS

Effect of Differential Coiling on Linear and Relative Parameters of Chromosomes -A. B. Iordanskii, A. R. Krumin', S. A. Pavulsone, N. S. Badaev, and G. V. Deryagin . . . . .	703	469
New Cobalt-Induced Puffs and the Effect of Cobalt on Enzymes -I. A. Rapoport, E. A. Ivanitskaya, Yu. L. Nikiforov, and M. M. Beknazaryants . . . . .	706	473
Inheritance of the Elements of Apomixis in Hybrids of Maize with <u>Tripsacum</u> -D. F. Petrov, N. I. Belousova, E. S. Fokina, R. M. Yatsenko and L. I. Laikova .	710	961
Meiotic Characteristics of Females in a Sex-Marked Strain of the Silkworm <u>(Bombyx mori</u> L.) -V. N. Vereiskaya and T. A. Vinnik . . . . .	713	1219
Obtaining Silkworm Hybrids Whose Ova Can Be Separated into White (Female) and Dark (Male) -V. A. Strunnikov . . . . .	716	1223
Self-Replicating Instability in a Series of Cell Generations of the Yeast <u>Schizosaccharomyces pombe</u> -O. N. Kurennyaya, N. P. Dubinin, L. D. Kurlapova, and V. A. Tarasov . . . . .	720	1469

Chimera Structure of Carrot Inflorescences as an Indicator of the Number of Initial Cells—N. D. Tarasenko .....	724	1473
Genetic Characteristics of Lon <sup>-</sup> Cultures—V. D. Timakov, V. S. Levashov, and V. A. Pekkel' .....	727	1476
<b>HISTOLOGY</b>		
Histochemical Analysis of the Glycogen Distribution in the Frog Retina —A. L. Shabadash and S. A. Shabadash .....	729	217
<b>HYDROBIOLOGY</b>		
Relationship of Phytoplankton Primary Production to Biogenic Elements and Light—Yu. G. Kabanova and Yu. E. Ochakovskii .....	732	1227
<b>MICROBIOLOGY</b>		
Combined Effect of Histones and the Antibacterial Agents Tubazide in Vitro and in Vivo—I. P. Ashmarin, G. I. Vavilin, B. I. Vishnevskii, I. É. Gaber, A. E. Perel'man, and A. Sh. Samedov .....	735	477
Electron Microscope Study of Iron—Manganese Concretions from Lake Punnus-Yarvi —G. A. Dubinina and Z. P. Deryugina .....	738	714
Mechanism of Transport of n-Paraffins into Yeast Cells—V. V. Rachinskii, E. G. Davidova, and A. I. Lapotyshkina .....	741	717
Fine Morphology of Spore Formation in <u>Clostridium septicum</u> —I. Sh. Vaisman .....	744	968
<b>MORPHOLOGY</b>		
Seasonal Changes in the Thyroid Gland and Intensity of Erythropoiesis in Young Atlantic Salmon ( <u>Salmo salar</u> L.) in the First Year of Life —M. F. Vernidub and N. N. Kolobova .....	748	500
Structure and Function of Digital Flexor Muscles of the Foot in Perching Birds (Passeriformes)—Z. Ametov .....	752	751
<b>PHYSIOLOGY</b>		
Trace Phenomena in the Brain in Relation to Short-Term Memory—L. G. Voronin, V. F. Konovalov, R. Ya. Senina, and I. S. Serikov .....	755	253
New Facts Concerned with the Relationship between Electrographic Immediate and Trace Processes and Short-Term Memory—L. G. Voronin and V. F. Konovalov .....	759	503
Effect of Gangliosides on the Cerebral Circulation—S. A. Mirzoyan, É. E. Mkheyan, É. S. Sekoyan, and O. P. Sotskii .....	762	507
Recording of Changes in Amount of Blood and Possibility of Determining Total Blood Volume in Body by Measurement of Electrical Resistance of Human Body—G. M. Yakovlev, N. L. Chernykh, and E. A. Petrakovskaya .....	765	510
Chemoreception in the Black Sea Dolphin— <u>Tursiops truncatus</u> Mont. —V. E. Sokolov and V. B. Kuznetsov .....	768	998
Relationship between Positive and Negative Emotional States and Changes in Blood Cholesterol Level and Arterial Blood Pressure—N. L. Yastrebtsova and L. V. Smutenko .....	771	1001
The Pathogenetic Role of Ischemic Toxin—T. M. Oksman, M. V. Dalin, E. B. Gorbovitskii, and V. V. Kovanov .....	774	1261
Effects of Renin and Angiotensin on Blood Clotting—Yu. Ya. Rodionov, V. Ya. Rodionov, and V. I. Koshelev .....	778	1504
Behavior of the Axial Period of Striated Muscle during Acetylcholine Contracture —N. V. Samosudova and G. M. Frank .....	781	1507
<b>VIROLOGY</b>		
Reconstruction of the Autonomous Genetic and Protein-Synthesizing System from Virus RNA and Isolated Mitochondria—V. S. Gaitskhoki, F. I. Ershov, O. I. Kiselev, L. K. Men'shikh, O. V. Zaitseva, L. V. Uryvaev, V. M. Zhdanov, and S. A. Neifakh	784	220

Experimental for Determination of the Toxic Activity of Influenza Virus as a Function  
of the Oxygen Consumption Inhibition in the Virus-Cell System  
- B. L. Voitsekhovskii, R. Ya. Polyak, and A. A. Smorodintsev . . . . .

787 1478

INDEX

Author Index, Volumes 196-201, 1971 . . . . .	791
Tables of Contents, Volumes 196-201, 1971. . . . .	795



